

Work Order ID 80805

February-29-12 11:44:21 AM

80805

Page 1

Item ID: D4571-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Cover

Start Date: 29/02/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 14/03/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Run Start

NR1

Approvals: Process Plan: MLJ

Date: 12/02/29

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4571	B

100	Cut blanks as per folio	0.00
-----	-------------------------	------

100

Bandsaw

Memo

0.00

SL 12/03/13

5

Jeaspa Bandsaw

CUT TO 7.250" LONG

105

0.00

105

HAAS I

Hardinge CNC LATHE SMALL

Memo

0.00

HAAS CNC vertical machine #1

MACHINE AS PER FOLIO FB081 AND DWG D4471

FOLIO REV: AA

DWG REV: B

DEBURR

PO/SL 12/03/22

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D45713 PAR #: _____ Fault Category: Machining NCR: Yes No QQA Star Date: 12/04/04
 Resolution: Acceptable Disposition: Acceptable QA: N/C Closed: OK Date: 12/4/4

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/03/21	105	hole tap too far from the edge Feed too high for center drill Since the part is holding in the jaw with a small surface R.C. operation error	S 12/03/26 Q57042	Acceptable. test fits in no problem.	PD 21 12/03/21	S 12/03/26	S 12/03/26 Q57042	S 12/03/26

NOTE: Date & initial all entries

Work Order ID 80805

February-29-12 11:44:21 AM

80805

Page 2

Item ID: D4571-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Cover

Start Date: 29/02/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 14/03/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 *110* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00	PB / JL 12-03-22			5			
120 *120* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	mf 12/03/22			5			
130 *130* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00	6 BL 123-27.						

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80805

February-29-12 11:44:21 AM

80805

Page 3

Item ID: D4571-3

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Cover

Start Date: 29/02/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 14/03/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Fire Red(Ref:4.3.5.10) per QSI005 4.3	0.00							
140									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <u>7h30</u> FINISH TIME: <u>8h00</u> OVEN TEMPERATURE: <u>320°C</u>								
145 QC3									
150	Identify as per dwg & Stock Location <u>3A</u>	0.00							
150									
Packaging	Memo	0.00							
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

6 2 (2P) 12/03/29.

Pto →

Sp 12/03/29

(6)

12/3/29

12/03/29

Dart Aerospace Ltd

W/O: 80805		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
		Perm. change						
12/03/29	# 145	ADD step for QC3.	PL RS	12-3-29 12-03-29	5.		S 12-3/29	
	# 145	QC3 inspection	H E	12-3-29 12-03-29			S 12/03/29	

Part No: D4571-3 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February-29-12 11:44:25 AM

Page 1

Work Order ID: 80805

80805

Parent Item: D4571-3

D4571-3

Parent Item Name: Cover

Start Date: 29/02/2012

Required Date: 14/03/2012

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A NEW ISSUE 11-12-21 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X02.50 0		Purchased	No				f	78.2500		3.210526			

M6061T6B1 500X02 500

**

6061-T6 Bar 1.50 x 2.50

SL 12/03/13

Location

Loc Qty

Loc Code

MAT004

78.25

103069

12

107387

30.25

16742

36

3.3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 80805
Description: COVER	Part Number: 04571-3
Inspection Dwg: 04571-3 Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0,635	$\pm 0,010$ $-0,000$	0,635	✓		VERN	GA-09
Ø 1,250	$\pm 0,010$	1,250	✓		"	"
0,715	$\pm 0,010$	0,715	✓		"	GA-08
2,350	$\pm 0,030$	2,350	✓		VERN	GA-09
1,175	$\pm 0,010$	1,175	✓		"	"
0,425	$\pm 0,010$	0,423	✓		"	"
3,000	$\pm 0,010$	3,003	✓		"	"
4,250	$\pm 0,010$	4,250	✓		"	"
Ø 0,750	$\pm 0,010 -0,000$	0,750	✓		"	"
1,925	$\pm 0,010$	1,923	✓		"	"
Ø 0,185x0,456	$\pm 0,010$	0,186x0,456	✓		"	"
7,000	$\pm 0,030$	7,003	✓		height G	"
5,800	$\pm 0,010$	5,798	✓		VERN	GA-09
3,700	$\pm 0,010$	3,700	✓		"	"
1,050	$\pm 0,010$	1,049	✓		"	"
0,850	$\pm 0,010$	0,850	✓		"	GA-08
1,200	$\pm 0,010$	1,195	✓		"	GA-08 GA-09
3,500	$\pm 0,010$	3,500	✓		"	GA-09
1,850	$\pm 0,010$	1,850	✓		"	GA-09
Ø 1,00	$\pm 0,010 -0,001$	0,999	✓		"	"
2,00	$\pm 0,030$	2,001	✓		height G	
0,443	$\pm 0,010$	0,441	✓		VERN	GA-09

Measured by: PO / S	Audited by: <i>mf</i>	Preliminary Approval:
Date: 12/03/21	Date: 12/03/22	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

1901

200

100

100

100

100

100

100

100

100

100

100

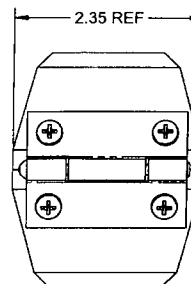
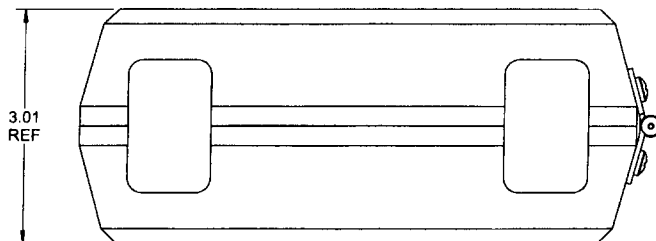
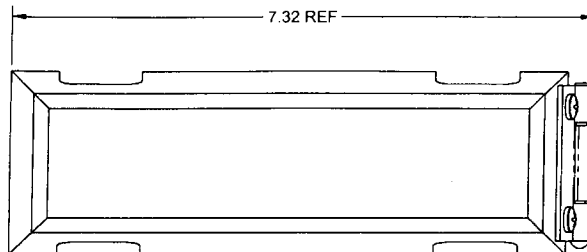
100

100

100

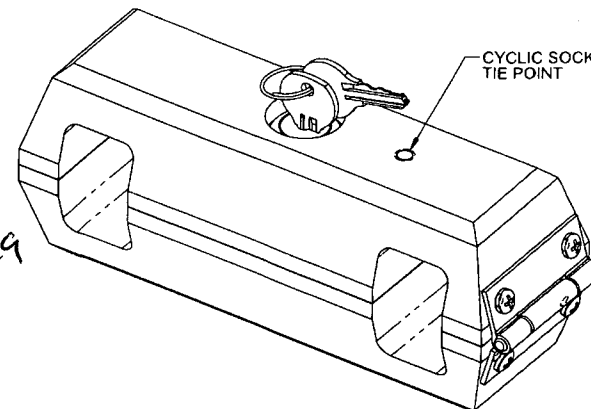
17

ITEM	QTY -041	QTY -051	P/N	DESCRIPTION
	X		D4571-041	TAIL ROTOR DISABLING KIT
	1	X	D4571-051	PEDAL LOCK
	1		D3384-047	CYCLIC SOCK
	1		MS 18995-47	SCREW, SKT-HD
	2		AN960-416	WASHER, FLAT
1		1	D3373-5	CAM LOCK ASSEMBLY
2		1	D3385-3	HINGE
3		1	D4571-1	BASE
4		1	D4571-3	COVER
5		4	MS51957-41	PH-HD SCREW, #8
6		2	97395A461	DOWEL PIN (MCMaster CARR)



D4571-051 PEDAL LOCK

80805.MLJ
12/02/29



RELEASED
2012-01-30

B	ADDED CYCLIC SOCK AND RELATED HARDWARE TO BOM ADDED DIM 0.560, DELETED DIM 0.188 SHT 3 ADDED DIM 1.200, DELETED DIM 0.300 SHT 4	RP	12.01.23
A	NEW ISSUE	RP	12.01.06
REV.	DESCRIPTION	BY	DATE
DESIGN	RP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RP		
CHECKED	MP	DRAWING NO.	REV. B
MFG. APPR.		D4571	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.	N/A	PEDAL LOCK	NTS
DATE	12.01.23	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

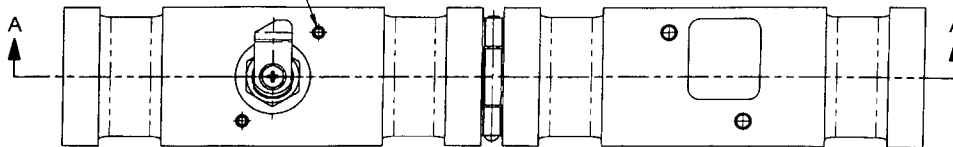
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

97395A461
DOWEL PIN (MCMASTER CARR)



D4571-3
COVER

D4571-1
BASE

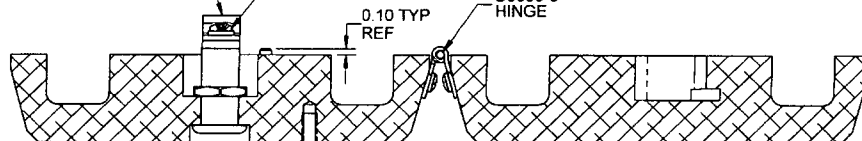
D4571-051 PEDAL LOCK ASSEMBLY

D3373-5
CAM LOCK ASSEMBLY
PEDAL LOCK

#10 LOCK WASHER REF
#10-32 FN-HD SCREW REF
(AS PER D3373-5)

0.10 TYP
REF

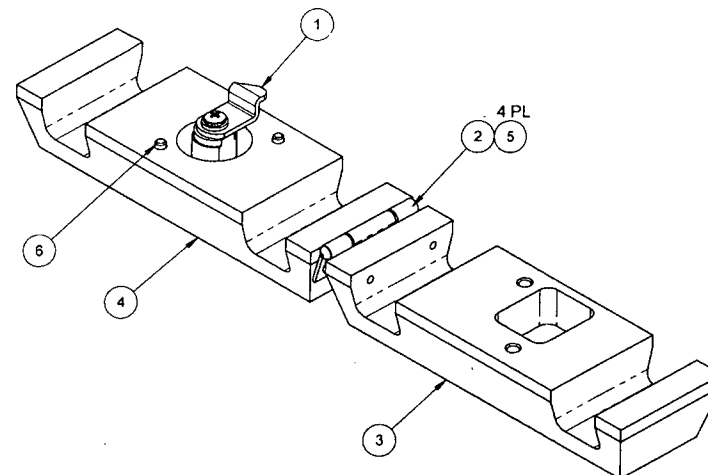
D3385-3
HINGE



SECTION A-A

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.75 LBS



RELEASED
2012-01-30

DESIGN	RP	DART AEROSPACE LTD	
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MP	DRAWING NO.	REV. B
MFG. APPR.	CE	D4571	SHEET 2 OF 4
APPROVED	MP	TITLE	SCALE
DE APPR.	N/A	PEDAL LOCK	NTS
DATE	12.01.23	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

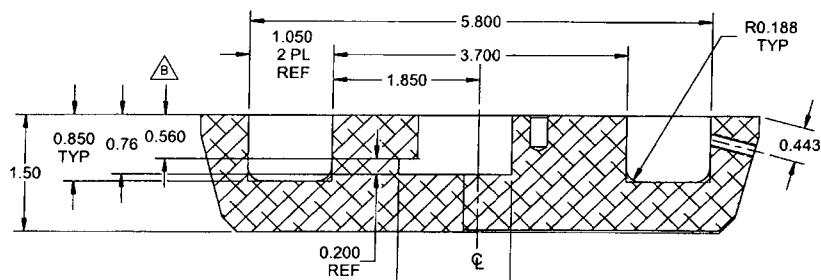
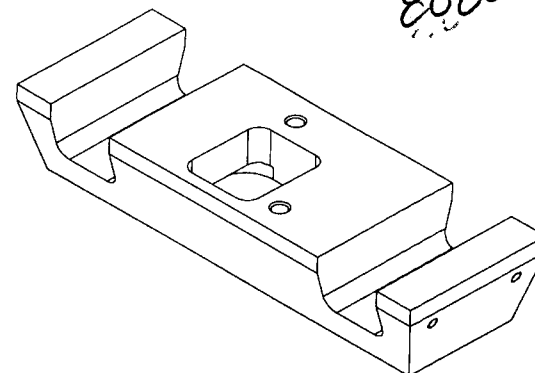
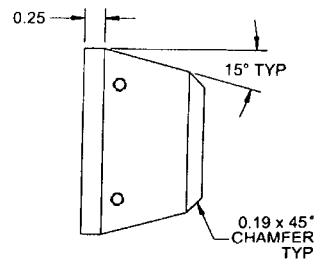
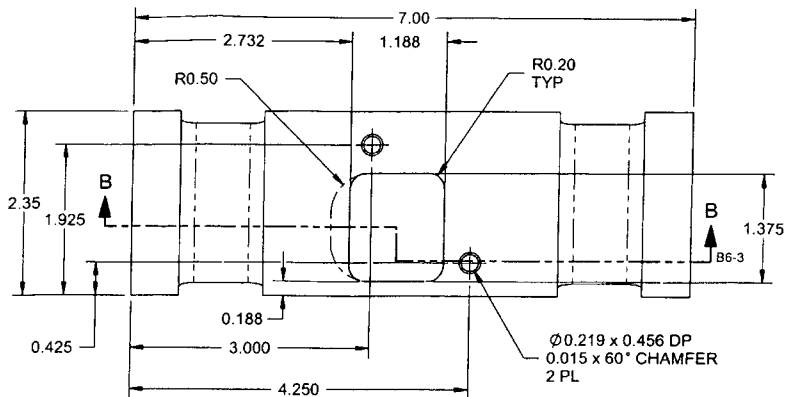
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

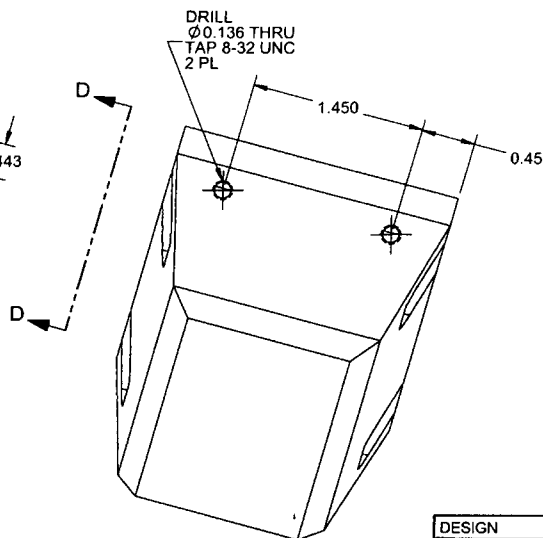
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



SECTION B-B C6-3



VIEW D-D

NOTES:

- 1) MATERIAL: 6061-T6/T651 PER QQ-A-200/8 OR QQ-A-225/8 OR ASTM B211 OR ASTM B221
REF: DART SPEC. M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) MASK INSIDE HOLES PRIOR TO FINISH

D4571-1 BASE

RELEASED
2012-01-30

DESIGN	RP	DART AEROSPACE LTD	
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MP	DRAWING NO.	REV. B
MFG. APPR.	B	D4571	SHEET 3 OF 4
APPROVED	MD	TITLE	SCALE
DE APPR.	N/A	PEDAL LOCK	NTS
DATE	12.01.23	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD			

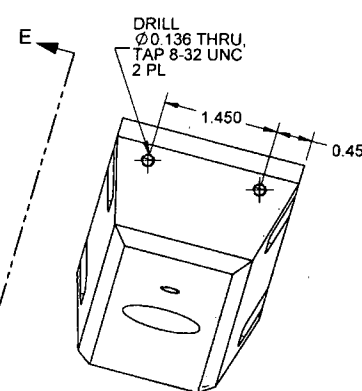
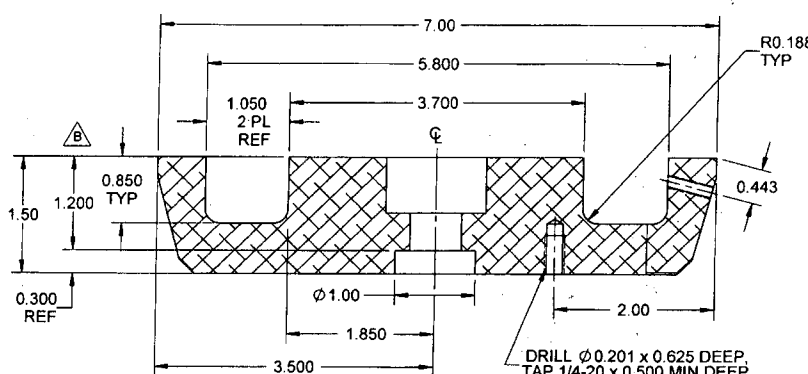
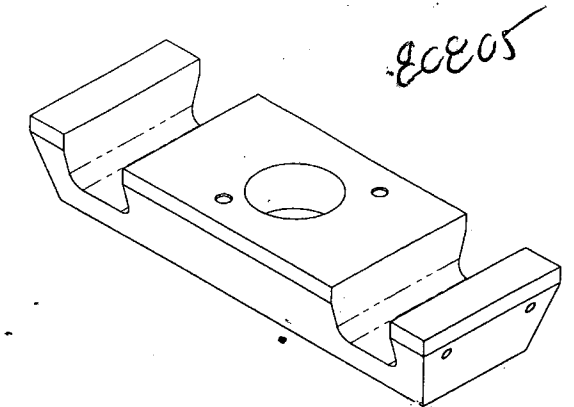
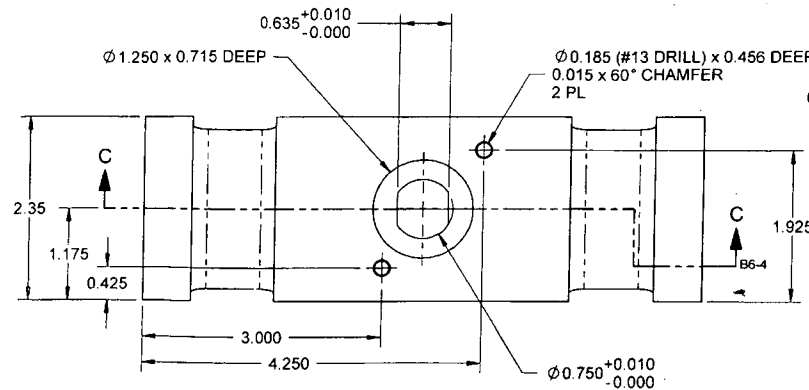
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries





SECTION C-C D6-4

D4571-3 COVER

NOTES:

- 1) MATERIAL: 6061-T6/T651 PER QQ-A-200/8 OR QQ-A-225/8 OR ASTM B211 OR ASTM B221
REF: DART SPEC. M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) MASK INSIDE HOLES PRIOR TO FINISH

RELEASED
2012-01-30

DESIGN	RP	DART AEROSPACE LTD	
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MP	DRAWING NO.	REV. B
MFG. APPR.		D4571	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.	N/A	PEDAL LOCK	NTS
DATE	12.01.23	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries